Access DB# 1834D

SEARCH REQUEST FORM

Scientific and Technical Information Center

Mail Box and Bldg/Room Loc	ation: 9A31	Results Format Preferre	Date: 3/28/06 er: 10/757, 4/7 d (circle): PAPER DISK E-MAIL
If more than one search is s	ubmitted, please pri	oritize searches in ord	er of need.
Please provide a detailed statement of Include the elected species or structure utility of the invention. Define any to known, Please attach a copy of the co	res, keywords, synonyms,	scribe as specifically as possib acronyms, and registry numb	le the subject matter to be searched.
Title of Invention: Deterge	nt Como	Tich.	
Inventors (please provide full name	s): Cilhs, B	esting bur, Pam	, Rogers
Earliest Priority Filing Date:	1111 102	· ·	
For Sequence Searches Only Please in appropriate serial number.		tion (parent, child, divisional, or	r issued patent numbers) along with the
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for Ha	SDKC. CT D	(5).	7
(0)	y sawye	organa E	component (4).
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100000 1000			
ansmati Su	Iphonic aci	il one for	
* locust be	on gum-	graft - Poly	(4- Styrensylphone acrol)
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Cclaim s)	•	
			SCIENTIFIC REFERENCE BR Sci 2 rech Inf - Cn#
			MAR 23 Helio
-			Pat. & T.M. Office

STAFF USE ONLY	Type of Search	****************	*****
Searcher:	NA Sequence (#)	stn 4685,96	st where applicable
Searcher Phone #:	AA Sequence (#)	Dialog	
Searcher Location:	Structure (#)	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic	Dr.Link	
Date Completed: 3/28/06 Searcher Prep & Review Time: 30	Litigation	Lexis/Nexis	
Searcher Prep & Review Time: 30	Fulltext	Sequence Systems	
Online Time:	Patent Family	WWW/Internet	
	Other	Other (specify)	
PTO-1590 (8-01)			•



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CONFIRMATION NO. 7488

Bib Data Sheet				-			
SERIAL NUMBER 10/759,417	FILING DATE 01/16/2004 RULE	CLASS 510		GROUP A		D	ATTORNEY OCKET NO. C4288(C)
Alyn James, Par Susanne Henni ** CONTINUING DAT ** FOREIGN APPLIC/ UNITED KINGE	vid Gibbs, Bebington, Urry, Bebington, UNITED ng Rogers, Bebington, A ************************************	KINGDOM; UNITED KINGE * ****					
** 04/21/2004 Foreign Priority claimed 35 USC 119 (a-d) conditions met Verified and Acknowledged Ex	Allowance	ter COU	TE OR NTRY ITED SDOM	SHEETS DRAWIN	ļ	IMS	INDEPENDENT CLAIMS 2
ADDRESS 000201 UNILEVER INTELLECTUAL PROPERTY GROUP 700 SYLVAN AVENUE, BLDG C2 SOUTH ENGLEWOOD CLIFFS, NJ 07632-3100							
Petergent composition FILING FEE FEE No.	S: Authority has been o	given in Paper redit DEPOSIT	ACCOL				g) essing Ext. of

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1-22 10/484,352 - chv mil
10/751,417 - 23 - (claims) Supetart al Swelch

CLAIMS

- 1 A built laundry detergent composition comprising
- (a) from 5 to 60 wt% of an organic detergent surfactant selected from anionic, nonionic, cationic, zwitterionic and amphoteric surfactants and combinations thereof,
- 10 (b) from 10 to 80 wt% of a detergency builder,
 - (c) from 0.1 to 10 wt% of a graft polymer having a locust bean gum backbone and grafts of an aromatic sulphonic acid,

 Gilactemannan (Polysaccarde Gallace); B-114-1166.

 (d) optionally other detergent ingredients to 100 wt%.
- 2 A detergent composition as claimed in claim 1, wherein the laundry detergent composition is a granular or 20 particulate composition.
 - A detergent composition as claimed in claim 1, wherein the laundry detergent composition is a liquid.
 - 4 A particulate laundry detergent composition comprising
 - (a) from 5 to 60 wt% of an organic detergent surfactant selected from anionic, nonionic, cationic, zwitterionic and30 amphoteric surfactants and combinations thereof,

5

- (b) optionally from 0 to 80 wt% of a detergency builder,
- (c) from 0.1 to 10 wt% of a graft polymer having a locust bean gum backbone and grafts of an aromatic sulphonic acid,
- (d) optionally other detergent ingredients to 100 wt%.
- 5 A laundry detergent composition as claimed in either 10 cliam 1 and/or claim 4, wherein the graft polymer is locust bean gum - graft - poly(4-styrenesulphonic acid).
- A detergent composition as claimed in either claim 1 and/or claim 4, wherein the organic detergent surfactant (a) comprises an anionic sulphonate or sulphonate surfactant optionally in admixture with one or more cosurfactants selected from ethoxylated nonionic surfactants, non-ethoxylated nonionic surfactants, ethoxylated sulphate anionic surfactants, cationic surfactants, amine oxides, alkanolamides and combinations thereof.
- 7 A detergent composition as claimed in either claim 1
 25 and/or/claim 4, which comprises a detergency builder (b)
 selected from zeolites, phosphates, and citrates.
- 8 A detergent composition as claimed in either claim 1 and/or claim 4, wherein the laundry detergent composition domprises other detergent ingredients (d) selected from bleach ingredients, enzymes, sodium carbonate, sodium

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- 25 -

101 102

silicate, sodium sulphate, foam controllers, foam boosters, perfumes, fabric conditioners, soil release polymers, dye transfer inhibitors, photobleaches, fluorescers and coloured speckles.

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53 - 43 m . Eth.

L1

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(FILE 'HOME' ENTERED AT 14:29:40 ON 28 MAR 2006)
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FILE 'HCAPLUS' ENTERED AT 14:29:50 ON 28 MAR 2006
E US20040152619/PN
1 SEA ABB=ON PLU=ON US20040152619/PN
D ALL
SEL RN
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FILE 'REGISTRY' ENTERED AT 14:31:58 ON 28 MAR 2006
  L2
                7 SEA ABB=ON PLU=ON (1344-09-8/BI OR 2052-01-9/BI OR
                  497-19-8/BI OR 727730-06-5/BI OR 727737-90-8/BI OR
                  7757-82-6/BI OR 9000-40-2/BI)
                  D SCAN
                  D L2 1-7 RN STR
                  D L2 1-2 CRN STR
 L3
                1 SEA ABB=ON PLU=ON 727730-06-5/RN
                  D SCAN
 L4
                1 SEA ABB=ON PLU=ON 9000-40-2/RN
                  D SCAN
 L5
               58 SEA ABB=ON PLU=ON 9000-40-2/CRN
 L6
             1655 SEA ABB=ON PLU=ON
                                      98-70-4/CRN
 L7
                2 SEA ABB=ON PLU=ON L5 AND L6
                  D SCAN
 L8
                1 SEA ABB=ON PLU=ON
                                       727737-90-8/RN
                  D SCAN
 L9
             376 SEA ABB=ON PLU=ON 79-31-2/CRN
                1 SEA ABB=ON PLU=ON L9 AND L5
                 D SCAN
                 E GALACTOMANNAN/CN
 L11
               1 SEA ABB=ON PLU=ON GALACTOMANNAN/CN
                 D SCAN
                 D RN
 L12
               1 SEA ABB=ON PLU=ON 11078-30-1/RN
                 D SCAN
 L13
              45 SEA ABB=ON PLU=ON
                                     11078-30-1/CRN
                 E GALACTOMANNAN/CN
                 E GALACTOMANNAN/CNS
 L14
              29 SEA ABB=ON PLU=ON GALACTOMANNAN/CNS
                 E POLYSACCHARIDE/CN
                 E POLYSACCHARIDE/CNS
            2400 SEA ABB=ON PLU=ON POLYSACCHARIDE/CNS
                 E POLYSACCHARIDE/CN
                 E 26
                 E POLYSACCHARIDE/CN
                 E POLYSACCHARIDE 1/CN
L16
               O SEA ABB=ON PLU=ON L14 AND L15
                 E ?POLYSACCHAR?/CN
                E ?POLYSACCHAR?/CNS
           3738 SEA ABB=ON PLU=ON ?POLYSACCHAR?/CNS
38 SEA ABB=ON PLU=ON ?GALACTOMAN?/CNS
0 SEA ABB=ON PLU=ON L18 AND L17
L17
L18
L19
     FILE 'HCAPLUS' ENTERED AT 14:56:01 ON 28 MAR 2006
                D SCAN L1
L20
           3040 SEA ABB=ON PLU=ON LOCUST? (3A) BEAN? (3A) GUM?
L21
              5 SEA ABB=ON PLU=ON L20(2A)(GRAFT?(A)POLYM?)
L22
              5 SEA ABB=ON PLU=ON L20(3A)(GRAFT?(A)POLYM?)
                E DETERGENT/CT
                E E4 +ALL
           4107 SEA ABB=ON PLU=ON DETERGENT? (2A) BUIL?
L23
                E DETERGENT/CT
L24
           1270 SEA ABB=ON PLU=ON L23 AND LAUNDR?
L25
           8885 SEA ABB=ON PLU=ON DETERG? (3A) LAUNDR?
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L26
           1224 SEA ABB=ON PLU=ON L25 AND L23
         226675 SEA ABB=ON PLU=ON SURFACT?
79308 SEA ABB=ON PLU=ON L27(5A)(ANION? OR CATION? OR
L27
L28
                NONION? OR ZWITTER? OR AMPHOTER?)
L29
            453 SEA ABB=ON PLU=ON L28 AND L26
L30
           2221 SEA ABB=ON PLU=ON
                                     L14
           2107 SEA ABB=ON PLU=ON L12
L31
L32
           3181 SEA ABB=ON PLU=ON L12 OR GALACTOMANNAN?
     FILE 'REGISTRY' ENTERED AT 15:16:32 ON 28 MAR 2006
                 E POLYSACCHARIDE/CN
                 E POLYSACCHARID/CN
     FILE 'HCAPLUS' ENTERED AT 15:19:10 ON 28 MAR 2006
           2408 SEA ABB=ON PLU=ON L18
L33
           3387 SEA ABB=ON PLU=ON L33 OR GALACTOMANNAN?
T.34
L35
         304992 SEA ABB=ON PLU=ON L17
         374348 SEA ABB=ON PLU=ON L35 OR POLYSACCHARID?
L36
           1263 SEA ABB=ON PLU=ON L35(2A)L36
L37
                D QUE
L38
            229 SEA ABB=ON PLU=ON POLYSACCHARIDE(2A) (BACKBONE OR
                BACK(W)BONE)
L39
             11 SEA ABB=ON PLU=ON L38 AND L32
                D SCAN
              O SEA ABB=ON PLU=ON L39 AND L26
L40
             11 SEA ABB=ON PLU=ON L38 AND L32
L41
             28 SEA ABB=ON PLU=ON L34 AND L37
L42
                D QUE
L43
             12 SEA ABB=ON PLU=ON L38 AND L34
          12 SEA ABB=ON PLU=ON
12302 SEA ABB=ON PLU=ON
L44
                                     L38 AND (L34 OR L32)
L45
                                     BETA (4A) LINK?
              5 SEA ABB=ON PLU=ON L45 AND L44
L46
                D L46 1-5 KWIC
              0 SEA ABB=ON PLU=ON L46 AND L29
L47
                D SCAN L46
L48
            953 SEA ABB=ON PLU=ON L28 AND L23
     FILE 'REGISTRY' ENTERED AT 15:53:01 ON 28 MAR 2006
                D SCAN L4
                D L4 IDE
     FILE 'HCAPLUS' ENTERED AT 15:54:51 ON 28 MAR 2006
              3 SEA ABB=ON PLU=ON L7
L49
              2 SEA ABB=ON PLU=ON L3
L50
           89 SEA ABB=ON PLU=ON L5
2952 SEA ABB=ON PLU=ON L6
L51
L52
              4 SEA ABB=ON PLU=ON L51 AND L52
L53
L54
              4 SEA ABB=ON PLU=ON L49 OR L50 OR L53
L55
             5 SEA ABB=ON PLU=ON L20(3A) (BACKBONE OR BACK(W)BONE)
             24 SEA ABB=ON PLU=ON L20(L) (BACKBONE OR BACK(W)BONE)
L56
             33 SEA ABB=ON PLU=ON L20 AND (BACKBONE OR BACK(W)BONE)
25 SEA ABB=ON PLU=ON AROMAT? (3A) SULPHON? (3A) ACID
L57
L58
             O SEA ABB=ON PLU=ON L22 AND L58
L59
L60
              O SEA ABB=ON PLU=ON L58 AND L20
L61
            815 SEA ABB=ON PLU=ON SULPHON? (A) ACID
L62
             25 SEA ABB=ON PLU=ON
                                     AROMATIC (3A) L61
L63
             75 SEA ABB=ON
                             PLU=ON
                                     AROMATIC(L)L61
              O SEA ABB=ON PLU=ON
L64
                                     L63 AND L20
L65
              O SEA ABB=ON PLU=ON L61 AND L20
L66
             59 SEA ABB=ON PLU=ON (L53 OR L54 OR L55 OR L56 OR L57
                OR L58)
1.67
              2 SEA ABB=ON PLU=ON L66 AND L26
                D SCAN
                D QUE STAT
L68
              7 SEA ABB=ON PLU=ON L54 OR L55 OR L67
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L69

40 SEA ABB=ON PLU=ON L39 OR (L41 OR L42 OR L43 OR L44)

```
OR L46
   L70
                  0 SEA ABB=ON PLU=ON L69 AND L48
                  0 SEA ABB=ON PLU=ON L69 AND L26
   L71
  L72
                  0 SEA ABB=ON PLU=ON L69 AND L23
                  2 SEA ABB=ON PLU=ON L69 AND L28
9 SEA ABB=ON PLU=ON L68 OR L73
  L73
  L74
                 254 SEA ABB=ON PLU=ON GALACTOMANNAN (2A) POLYSACCHARIDE
  L75
  L76
                  0 SEA ABB=ON PLU=ON L75 AND L48
  L77
                   0 SEA ABB=ON PLU=ON L75 AND L23
  L78
                  3 SEA ABB=ON
                                    PLU=ON L75 AND L28
                     D SCAN
  L79
                  10 SEA ABB=ON PLU=ON L74 OR L78
                     D QUE L66
  L80
                   1 SEA ABB=ON PLU=ON L66 AND L48
                     D SCAN
  L81
                  10 SEA ABB=ON PLU=ON L79 OR L80
        FILE 'REGISTRY' ENTERED AT 16:22:56 ON 28 MAR 2006
  L82
                  1 SEA ABB=ON PLU=ON 98-70-4/RN
                     D SCAN
                     D IDE
        FILE 'HCAPLUS' ENTERED AT 16:23:51 ON 28 MAR 2006
                  2 SEA ABB=ON PLU=ON L3/P OR L3/DP
                   D SCAN
 L84
                 97 SEA ABB=ON PLU=ON L82
 L85
                 0 SEA ABB=ON PLU=ON L84 AND L4
              6 SEA ABB=ON PLU=ON (ANION? OR L27) (2A) SULPHONAT?
0 SEA ABB=ON PLU=ON L86 AND L48
0 SEA ABB=ON PLU=ON L86 AND L81
QUE ABB=ON PLU=ON ZEOLIT? OR PHOSPHAT? OR CITRAT?
 1.86
 L88
 L89
              7640 SEA ABB=ON PLU=ON L28 AND L89
 L90
                2 SEA ABB=ON PLU=ON L90 AND L81
98 SEA ABB=ON PLU=ON L83 OR L81 OR L66 OR L69
2 SEA ABB=ON PLU=ON L92 AND L90
 L91
 L92
 1.93
                10 SEA ABB=ON PLU=ON L81 OR L83 OR L91 OR L93
 L94
                3 SEA ABB=ON PLU=ON (GRANUL? OR GRAIN? OR LIQ?) AND
 L95
                    L94
                10 SEA ABB=ON PLU=ON L95 OR L94
QUE ABB=ON PLU=ON ETHOX? OR NONETHOX? OR NON(W) ETHOX?
 L96
 L97
                     OR ETHOX? (2A) (SULFAT? OR SULPHAT?)
                 QUE ABB=ON PLU=ON AMINE(A)OXIDE OR ALKANOLAMIDE
2 SEA ABB=ON PLU=ON L96 AND (L97 OR L98)
 1,98
      FILE 'REGISTRY' ENTERED AT 16:48:49 ON 28 MAR 2006
L100
                 1 SEA ABB=ON PLU=ON 497-19-8/RN
                   D SCAN
L101
                 1 SEA ABB=ON PLU=ON 1344-09-8/RN
                   D SCAN
                 1 SEA ABB=ON PLU=ON 7757-82-6/RN
                   D SCAN
      FILE 'HCAPLUS' ENTERED AT 16:50:34 ON 28 MAR 2006
           43487 SEA ABB=ON PLU=ON L100
132767 SEA ABB=ON PLU=ON L103 OR (SODIUM OR NA) (A) (CARBONATE
L103
L104
                   OR CO3 OR H2CO3) OR NA2CO3 OR NA2(A)H2CO3
           26475 SEA ABB=ON PLU=ON L101
46677 SEA ABB=ON PLU=ON L105 OR (SODIUM OR NA) (A) SILICATE
34190 SEA ABB=ON PLU=ON L102
92084 SEA ABB=ON PLU=ON L107 OR (SODIUM OR NA) (A) (SULFATE
L106
L107
L108
                   OR SULPHATE OR SO4 OR H2SO4) OR NA2SO4
L109
                   QUE ABB=ON PLU=ON BLEACH? OR ENZYME OR L104 OR L106
                   OR L108 OR FOAM? (2A) (CONTROL? OR BOOST?)
L110
                  QUE ABB=ON PLU=ON PERFUME OR FABRIC(2A)CONDITION? OR
                   SOIL(3A) RELEASE(3A) POLYM? OR FLUORES?
L111
                  QUE ABB=ON PLU=ON DYE(3A)TRANSFER?(3A)INHIBIT? OR
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PHOTOBLEACH? OR PHOTO(W)BLEACH? OR (COLOR?)(
            10 SEA ABB=ON PLU=ON L96 OR L99
L112
             3 SEA ABB=ON PLU=ON L112 AND (L109 OR L110 OR L111)
L113
            10 SEA ABB=ON PLU=ON L112 OR L113
L114
L115
             2 S L8
L116
             2 S L10
L117
          1554 S L9
L118
          3267 S L4
L119
            8 S L117 AND (L118 OR L51)
L120
            3 S L119 AND DETERG?
          . 10 S L120 OR L114 OR L115 OR L116
```

```
=> => d que stat 1121
  1.3
                1 SEA FILE=REGISTRY ABB=ON PLU=ON 727730-06-5/RN
                1 SEA FILE=REGISTRY ABB=ON PLU=ON 9000-40-2/RN
  1.4
               58 SEA FILE=REGISTRY ABB=ON PLU=ON 9000-40-2/CRN
  L_5
             1655 SEA FILE=REGISTRY ABB=ON PLU=ON 98-70-4/CRN
2 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND L6
1 SEA FILE=REGISTRY ABB=ON PLU=ON 727737-90-8/RN
  L6
  L7
 L8
              376 SEA FILE=REGISTRY ABB=ON PLU=ON 79-31-2/CRN
               1 SEA FILE=REGISTRY ABB=ON PLU=ON L9 AND L5
 L10
                1 SEA FILE=REGISTRY ABB=ON PLU=ON 11078-30-1/RN
 L12
             3738 SEA FILE=REGISTRY ABB=ON PLU=ON ?POLYSACCHAR?/CNS
38 SEA FILE=REGISTRY ABB=ON PLU=ON ?GALACTOMAN?/CNS
 L17
 L18
             3040 SEA FILE=HCAPLUS ABB=ON PLU=ON LOCUST? (3A) BEAN? (3A) GU
 L20
             4107 SEA FILE=HCAPLUS ABB=ON PLU=ON DETERGENT? (2A) BUIL?
 L23
             8885 SEA FILE=HCAPLUS ABB=ON PLU=ON DETERG? (3A) LAUNDR?
 L25
            1224 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND L23
 L26
          226675 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACT?
 1.27
           79308 SEA FILE=HCAPLUS ABB=ON PLU=ON L27(5A) (ANION? OR
                  CATION? OR NONION? OR ZWITTER? OR AMPHOTER?)
            3181 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 OR GALACTOMANNAN?
 L32
 L33
            2408 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
            3387 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 OR GALACTOMANNAN?
 L34
 L35
          304992 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
          374348 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 OR POLYSACCHARID?
 L36
L37
            1263 SEA FILE=HCAPLUS ABB=ON PLU=ON L35(2A)L36
             229 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYSACCHARIDE(2A)(BAC
L38
                 KBONE OR BACK(W) BONE)
              11 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L32
L39
L41
              11 SEA FILE=HCAPLUS ABB=ON
                                           PLU=ON L38 AND L32
              28 SEA FILE=HCAPLUS ABB=ON PLU=ON L34 AND L37
L42
              12 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L34
L43
L44
              12 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND (L34 OR L32)
L45
          12302 SEA FILE=HCAPLUS ABB=ON
                                          PLU=ON BETA(4A)LINK?
L46
               5 SEA FILE=HCAPLUS ABB=ON
                                           PLU=ON
                                                   L45 AND L44
L48
            953 SEA FILE=HCAPLUS ABB=ON
                                           PLU=ON
                                                   L28 AND L23
L49
              3 SEA FILE=HCAPLUS ABB=ON
                                           PLU=ON L7
L50
              2 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                   L3
L51
             89 SEA FILE=HCAPLUS ABB=ON
                                           PLU=ON
                                                   L5
L52
           2952 SEA FILE=HCAPLUS ABB=ON
                                           PLU=ON
                                                   L6
L53
             4 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                   L51 AND L52
L54
              4 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                   L49 OR L50 OR L53
L55
              5 SEA FILE=HCAPLUS ABB=ON PLU=ON L20(3A) (BACKBONE OR
                BACK (W) BONE)
             24 SEA FILE=HCAPLUS ABB=ON PLU=ON L20(L) (BACKBONE OR
L56
                BACK (W) BONE)
             33 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (BACKBONE OR
L57
```

		BACK (W) BONE)
L58	25	SEA FILE=HCAPLUS ABB=ON PLU=ON AROMAT? (3A) SULPHON? (3A) ACID
L66	59	SEA FILE=HCAPLUS ABB=ON PLU=ON (L53 OR L54 OR L55 OR L56 OR L57 OR L58)
L67	. 2	SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND L26
L68	7	SEA FILE=HCAPLUS ABB=ON PLU=ON L54 OR L55 OR L67
L69	40	SEA FILE=HCAPLUS ABB=ON PLU=ON L39 OR (L41 OR L42 OR L43 OR L44) OR L46
L73	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L69 AND L28
L74	9	SEA FILE=HCAPLUS ABB=ON PLU=ON L68 OR L73
L75	254	SEA FILE=HCAPLUS ABB=ON PLU=ON GALACTOMANNAN(2A)POLYS ACCHARIDE
L78	3	SEA FILE=HCAPLUS ABB=ON PLU=ON L75 AND L28
L79	10	SEA FILE=HCAPLUS ABB=ON PLU=ON L74 OR L78
L80	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND L48
L81	10	SEA FILE=HCAPLUS ABB=ON PLU=ON L79 OR L80
L83	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L3/P OR L3/DP
L89		QUE ABB=ON PLU=ON ZEOLIT? OR PHOSPHAT? OR CITRAT?
L90	7640	SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND L89
L91	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L90 AND L81
L92	98	SEA FILE=HCAPLUS ABB=ON PLU=ON L83 OR L81 OR L66 OR .
		L69
L93	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L92 AND L90
L94	10	SEA FILE=HCAPLUS ABB=ON PLU=ON L81 OR L83 OR L91 OR
		L93
L95	. 3	SEA FILE=HCAPLUS ABB=ON PLU=ON (GRANUL? OR GRAIN? OR
		LIQ?) AND L94
L96	10	SEA FILE=HCAPLUS ABB=ON PLU=ON L95 OR L94
L97		QUE ABB=ON PLU=ON ETHOX? OR NONETHOX? OR NON(W)ETHOX
		? OR ETHOX?(2A)(SULFAT? OR SULPHAT?)
L98	•	QUE ABB=ON PLU=ON AMINE(A)OXIDE OR ALKANOLAMIDE
L99	2	QUE ABB=ON PLU=ON AMINE(A)OXIDE OR ALKANOLAMIDE SEA FILE=HCAPLUS ABB=ON PLU=ON 196 AND (L97 OR L98) SEA FILE=REGISTRY ABB=ON PLU=ON 497-19-8/RN
L100	1	SEA FILE=REGISTRY ABB=ON PLU=ON 497-19-8/RN
L101	1	SEA FILE=REGISTRY ABB=ON PLU=ON 1344-09-8/RN
L102	1	SEA FILE=REGISTRY ABB=ON PLU=ON 7757-82-6/RN
L103	43487	SEA FILE=HCAPLUS ABB=ON PLU=ON L100
L104	132767	SEA FILE=HCAPLUS ABB=ON PLU=ON L103 OR (SODIUM OR
		NA) (A) (CARBONATE OR CO3 OR H2CO3) OR NA2CO3 OR NA2 (A) H2CO3
L105	26475	SEA FILE=HCAPLUS ABB=ON PLU=ON L101
L106	46677	SEA FILE=HCAPLUS ABB=ON PLU=ON L105 OR (SODIUM OR
		NA) (A) SILICATE
L107	34190	SEA FILE=HCAPLUS ABB=ON PLU=ON L102
L108	92084	SEA FILE=HCAPLUS ABB=ON PLU=ON L107 OR (SODIUM OR
		NA) (A) (SULFATE OR SULPHATE OR SO4 OR H2SO4) OR NA2SO4
L109		QUE ABB=ON PLU=ON BLEACH? OR ENZYME OR L104 OR L106
		OR L108 OR FOAM? (2A) (CONTROL? OR BOOST?)
L110		QUE ABB=ON PLU=ON PERFUME OR FABRIC (2A) CONDITION? OR
		SOIL(3A)RELEASE(3A) POLYM? OR FLUORES?
L111		QUE ABB=ON PLU=ON DYE(3A)TRANSFER?(3A)INHIBIT? OR PH OTOBLEACH? OR PHOTO(W)BLEACH? OR (COLOR? OR COLOUR?)(2A
) SPECK?
L112	10	SEA FILE=HCAPLUS ABB=ON PLU=ON L96 OR L99
L113		
пттэ	3	
T 1 1 4	1.0	L110 OR L111)
L114		SEA FILE=HCAPLUS ABB=ON PLU=ON L112 OR L113
L115		SEA FILE=HCAPLUS ABB=ON PLU=ON L8
L116		SEA FILE=HCAPLUS ABB=ON PLU=ON L10
L117		SEA FILE=HCAPLUS ABB=ON PLU=ON L9
L118		SEA FILE=HCAPLUS ABB=ON PLU=ON L4
L119	8	SEA FILE=HCAPLUS ABB=ON PLU=ON L117 AND (L118 OR
	_	L51)
L120		SEA FILE=HCAPLUS ABB=ON PLU=ON L119 AND DETERG?
L121	10	SEA FILE=HCAPLUS ABB=ON PLU=ON L120 OR L114 OR L115
		OR L116

=> d l121 1-10 ibib abs hitstr hitind

L121 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:359470 HCAPLUS

DOCUMENT NUMBER:

143:28361

TITLE:

Gelation studies, 3. Comparative monitoring of the gelation process of a thermoreversible gelling system made of xanthan gum and locust bean gum by dynamic light scattering and 1H

NMR spectroscopy

AUTHOR(S):

Richter, Sven; Brand, Torsten; Berger, Stefan Institute of Physical Chemistry and

CORPORATE SOURCE:

Electrochemistry, Dresden University of Technology, Dresden, D-01062, Germany

SOURCE:

Macromolecular Rapid Communications (2005),

26(7), 548-553 CODEN: MRCOE3; ISSN: 1022-1336 Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE:

PUBLISHER:

Journal

LANGUAGE: English

The sol-gel transition of one thermoreversible gelling mixture made of xanthan gum and locust bean gum has been studied by using in situ time-resolved dynamic light scattering (DLS) and measuring the spin-lattice relaxation time T1 of several protons. A critical dynamical behavior was observed near the sol-gel transition, which is characterized by the presence of power-law spectra over four decades of the delay time in the time-intensity correlation function g2(t)-1 .apprx. t- μ at 48°C. The increase in T1 with increasing temperature becomes steeper at 50°C indicating a significant change in the local mobility of one anomeric proton of the xanthan side chain and the anomeric protons of the locust bean qum mannose backbone.

44-7 (Industrial Carbohydrates)

REFERENCE COUNT:

THERE ARE 41 CITED REFERENCES AVAILABLE 41 FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L121 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2004:606531 HCAPLUS

141:142228

TITLE

Laundry detergent compositions containing locust

bean gum graft polymer as antiredeposition agent

INVENTOR(S):

Gibbs, Christopher David; Parry, Alyn James;

Rogers, Susanne Henning

PATENT ASSIGNEE(S):

Unilever Plc, UK; Unilever Nv; Hindustan Lever

DATE

2003 1218

Limited

SOURCE:

PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	
WO 2004063317	A1	20040729	WO 2003-EP14522	/

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, AZ CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,

```
ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
              KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
             MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,
              AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY,
              CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                   20040729
                                                 CA 2003-2512830
     CA 2512830
                            AA
                                                                           2003
                                                                          1218
                                                AU 2003-288257
     AU 2003288257
                            A1
                                   20040810
                                                                           2003
                                                                           1218
                                   20060208
                                                 EP 2003-780155
     EP 1623002
                            Α1
                                                                           2003
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK
                                                US 2004-759417
                                   20040805
     US 2004152619
                            A1
                                                                           2004
                                                                           0116
                                                 GB 2003-1022
PRIORITY APPLN. INFO.:
                                                                           2003
                                                                           0116
                                                 WO 2003-EP14522
                                                                           2003
                                                                           1218
     Incorporation in a laundry detergent composition of
AB
     a graft polymer having a locust bean
     gum backbone and grafts of an aromatic sulfonic
     acid improves antiredeposition properties. The preferred polymer
     is locust bean gum graft
     poly(4-styrenesulfonic acid). A built laundry
     detergent composition comprises: (a) from 5 to 60 wt% of an
     organic detergent surfactant selected from
     anionic, nonionic, cationic,
     zwitterionic and amphoteric surfactants
     and combinations thereof; (b) from 10 to 80 wt% of a
     detergency builder; (c) from 0.1 to 10 wt% of a graft
     polymer having a locust bean gum
     backbone and grafts of an aromatic sulfonic acid; (d)
     optionally other detergent ingredients to 100 wt%.
TТ
     727730-06-5P
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
         (laundry detergent compns. containing
         locust bean gum graft polymer as
         antiredeposition agent)
     727730-06-5 HCAPLUS
RN
     Carob gum, polymer with 4-ethenylbenzenesulfonic acid, graft (9CI)
CN
        (CA INDEX NAME)
     CM
          9000-40-2
     CRN
     CMF
          Unspecified
          PMS, MAN
```

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM :

```
CRN 98-70-4
CMF C8 H8 O3 S
```

IT 727737-90-8P

> RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(laundry detergent compns. containing

locust bean gum graft polymer as

antiredeposition agent)

RN 727737-90-8 HCAPLUS

Carob gum, 2-methylpropanoate (9CI) (CA INDEX NAME) CN

CM

CRN 9000-40-2

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-31-2 CMF C4 H8 O2

ΙT 9000-40-2, Locust bean gum

RL: RCT (Reactant); RACT (Reactant or reagent) (laundry detergent compns. containing locust bean gum graft polymer as

antiredeposition agent)

RN9000-40-2 HCAPLUS

CN Carob gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

497-19-8, Sodium carbonate, uses

1344-09-8, Sodium silicate 7757-82-6, Sodium sulphate, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(laundry detergent compns. containing

locust bean gum graft polymer as antiredeposition agent)

497-19-8 HCAPLUS RN

Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME) CN

HO- C- OH

•2 Na

RN 1344-09-8 HCAPLUS
CN Silicic acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 7757-82-6 HCAPLUS
CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)

●2 Na

ICM C11D003-37

46-5 (Surface Active Agents and Detergents) CC locust bean gum styrenesulfonicacid graft copolymer laundry detergent; antiredeposition agent locust bean gum graft laundry detergent IT Textiles (cotton; laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent) ΙT Zeolites (synthetic), uses RL: TEM (Technical or engineered material use); USES (Uses) (detergency builder; laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent) IT Polyester fibers, uses RL: TEM (Technical or engineered material use); USES (Uses) (fabrics; laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent) IT Detergents (laundry, granular; laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent) IT Detergents (laundry, liquid; laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent) TT 727730-06-5P RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent) IT 727737-90-8P RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

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THE TOTAL PROPERTY.

```
(laundry detergent compns. containing
         locust bean gum graft polymer as
         antiredeposition agent)
     2052-01-9, 2-Bromoisobutyric acid 9000-40-2,
     Locust bean gum
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
     497-19-8, Sodium carbonate, uses
     1344-09-8, Sodium silicate
     7757-82-6, Sodium sulphate, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
L121 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2004:606530 HCAPLUS
DOCUMENT NUMBER:
                         141:142227
TITLE:
                         Laundry detergent
                         compositions containing locust
                         bean gum graft polymer as
                         antiredeposition agent
INVENTOR(S):
                         Gibbs, Christopher David; Parry, Alyn James;
                         Rogers, Susanne Henning
PATENT ASSIGNEE(S):
                         Unilever Plc, UK; Unilever Nv; Hindustan Lever
                         Limited
SOURCE:
                         PCT Int. Appl., 27 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
                        ----
                                           -----
     -----
    WO 2004063316
                         A1
                               20040729
                                           WO 2003-EP14521
                                                                  2003
                                                                  1218
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY,
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M: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
                                 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
                                 GN, GQ, GW, ML, MR, NE, SN, TD, TG
             AU 2003293934
                                                                  A1
                                                                                   20040810
                                                                                                                  AU 2003-293934
                                                                                                                                                                             1218
             EP 1583814
                                                                  A1
                                                                                  20051012
                                                                                                                 EP 2003-789338
                                                                                                                                                                             2003
                               AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
                                                                                                                                                                             1218
                                 EE, HU, SK
            BR 2003017955
                                                                                 20051129
                                                                  Α
                                                                                                                 BR 2003-17955
                                                                                                                                                                            2003
                                                                                                                                                                            1218
PRIORITY APPLN. INFO.:
                                                                                                                GB 2003-1020
```

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2003 0116

WO 2003-EP14521

2003 1218

AB Incorporation in a laundry detergent composition of a graft polymer having a locust bean gum backbone and grafts of an aromatic sulfonic acid improves antiredeposition properties. The preferred polymer is locust bean gum graft poly(4-styrenesulfonic acid).

IT 727730-06-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent)

RN 727730-06-5 HCAPLUS

N Carob gum, polymer with 4-ethenylbenzenesulfonic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 9000-40-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 98-70-4 CMF C8 H8 O3 S

antiredeposition agent)

RN 727737-90-8 HCAPLUS

CN Carob gum, 2-methylpropanoate (9CI) (CA INDEX NAME)

CM 1

CRN 9000-40-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-31-2 CMF C4 H8 O2

```
H<sub>3</sub>C
H3C-CH-C-OH
·IT
     9000-40-2, Locust bean gum
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
RN
     9000-40-2 HCAPLUS
CN
     Carob gum (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     497-19-8, Sodium carbonate, uses
     1344-09-8, Sodium silicate
     7757-82-6, Sodium sulphate, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
         (laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
RN
     497-19-8 HCAPLUS
CN
     Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME)
```

RN 1344-09-8 HCAPLUS
CN Silicic acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 7757-82-6 HCAPLUS
CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)

●2 Na

ICM C11D003-37

IC

CC 46-5 (Surface Active Agents and Detergents)

ST antiredeposition agent locust bean gum
 graft polystyrenesulfonicacid; laundry detergent
 antiredeposition agent grafted locust bean
 gum

IT Textiles
 (cotton; laundry detergent compns. containing
 locust bean gum graft polymer as
 antiredeposition agent)

IT Zeolites (synthetic), uses
 RL: TEM (Technical or engineered material use); USES (Uses)

```
(detergency builder; laundry
        detergent compns. containing locust bean
        gum graft polymer as antiredeposition agent)
IT
     Polyester fibers, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (fabrics; laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
IT
     Detergents
        (laundry, granular; laundry
        detergent compns. containing locust bean
        gum graft polymer as antiredeposition agent)
TΤ
     Detergents
        (laundry, liquid; laundry detergent compns. containing locust bean
        gum graft polymer as antiredeposition agent)
     727730-06-5P
IT
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
     or engineered material use); PREP (Preparation); USES (Uses)
        (laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
TΤ
     727737-90-8P
     RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation);
     PREP (Preparation); RACT (Reactant or reagent)
        (laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
IT
     2052-01-9, 2-Bromoisobutyric acid 9000-40-2,
     Locust bean gum
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
     497-19-8, Sodium carbonate, uses
     1344-09-8, Sodium silicate
7757-82-6, Sodium sulphate, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (laundry detergent compns. containing
        locust bean gum graft polymer as
        antiredeposition agent)
L121 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2004:411777 HCAPLUS
DOCUMENT NUMBER:
                          140:408392
TITLE:
                          Hydrophilic coating compositions, dew
                          condensation prevention agents and method
                          therewith
INVENTOR(S):
                          Tanaka, Hiroki; Iimura, Naoto; Yoshikawa, Jun;
                          Kanno, Mitsumasa
                          Toto Ltd., Japan
Jpn. Kokai Tokkyo Koho, 14 pp.
PATENT ASSIGNEE(S):
SOURCE:
                          CODEN: JKXXAF
                          Patent
DOCUMENT TYPE:
LANGUAGE:
                          Japanese
FAMILY ACC. NUM. COUNT:
                         1
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                      DATE
     JP 2004143443
                          A2
                                 20040520
                                             JP 2003-335817
                                                                      2003
                                                                      0926
PRIORITY APPLN. INFO.:
                                              JP 2002-285364
                                                                      2002
```

Les Henderson

0930

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Title compns. contain (a) water-soluble natural tackifying
       polysaccharides, (b) hydrophilic metal oxide particles, (c)
       nonionic, anionic, cationic,
       amphoteric and/or fluoro surfactants, and (d)
       solvents. An aqueous composition containing Kelzan 0.02, Snowtex 3,
       polyoxyethylene alkyl ether 0.1, and EtOH 20 parts showed good
       storage stability at 50° over 3 mo and was spread on a
      glass plate and dried at room temp for 5 min to form a transparent
      film with haze 0.06%, water-contact angle of 4.7°, and
       long-lasting dew condensation prevention.
       11078-30-1, Galactomannan 11138-66-2,
 IT
       Kelzan
      RL: TEM (Technical or engineered material use); USES (Uses)
          (natural polysaccharide tackifier-, hydrophilic metal
         oxide-, and surfactant-containing aqueous coatings as dew condensation
         preventers)
 RN
      11078-30-1 HCAPLUS
      D-Galacto-D-mannan (9CI) (CA INDEX NAME)
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 RN
      11138-66-2 HCAPLUS
 CN
      Xanthan gum (9CI)
                         (CA INDEX NAME)
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 IC
      ICM C09D201-00
           C09D005-00; C09D105-00; C09K003-00; C09K003-18
 CC
      42-13 (Coatings, Inks, and Related Products)
      Amine oxides
      Amino acids, uses
      Esters, uses
      Ethers, uses
        Phosphates, uses
      Quaternary ammonium compounds, uses
      Sulfates, uses
      RL: TEM (Technical or engineered material use); USES (Uses)
         (surfactants; natural polysaccharide tackifier-, hydrophilic
         metal oxide-, and surfactant-containing aqueous coatings as dew
         condensation preventers)
     9000-30-0, Guar gum 11078-30-1, Galactomannan
     11138-66-2, Kelzan 25322-68-3D, alkyl ether (sodio
     sulfate) derivs.
     RL: TEM (Technical or engineered material use); USES (Uses)
         (natural polysaccharide tackifier-, hydrophilic metal
        oxide-, and surfactant-containing aqueous coatings as dew condensation
        preventers)
L121 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                          2003:565310 HCAPLUS
DOCUMENT NUMBER:
                          140:237334
TITLE:
                          The use of nonionic galactomannan
                          polysaccharides for stabilisation of
                          ASA emulsions
AUTHOR(S):
                          Koskela, Juha P.; Hormi, Osmo E. O.; Roberts,
                          John C.; Peng, Guomei
CORPORATE SOURCE:
                         Department of Paper Science, University of
                         Manchester Institute of Science and
                         Technology, Manchester, M60 1QD, UK
Appita Journal (2003), 56(3), 213-217
SOURCE:
                         CODEN: APJOES; ISSN: 1038-6807
PUBLISHER:
                         Appita
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
    Alkenyl succinic anhydride (ASA)-galactomannan (guar gum)
    emulsions with different ASA/galactomannan ratios and different
```

, . 門体管 包. 组织基 生

TOTAL MARKET

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ASA concns. were prepared under controlled conditions. These
ASA-guar gum emulsions were subjected to various treatments using
a deposition rotor to evaluate their stability. Deposition expts.
showed that the more guar gum used in the emulsion, the more stable was the emulsion. Furthermore, the use of a surfactant in
this combination resulted in even less deposition, and a much
smaller average particle size of the emulsion. The stability of these
ASA emulsions has been studied and compared to ASA emulsions with
two cationic starch derivs. as stabilizers. Internal sizing tests
using ASA-guar gum emulsions as a sizing agent indicates that
these emulsions are usable as a stock sizing agent as well.
43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 44
```

stabilizer alkenyl succinic anhydride nonionic galactomannan emulsion paper size; surfactant galactomannan polysaccharide stabilization alkenyl succinic anhydride emulsion

TΤ Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses) (lanolin, ethoxylated propoxylated, Lanexol, surfactants; effect of surfactant on preparation and stability of alkenyl succinic anhydride-nonionic guar gum emulsions for paper sizing)

9005-25-8D, Potato starch, functionalized, cationic ΙT RL: PRP (Properties)

(effect of surfactant on preparation and stability of alkenyl succinic anhydride-nonionic guar gum emulsions for paper sizing)

REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L121 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:97505 HCAPLUS

DOCUMENT NUMBER:

138:155393

TITLE:

CC

Use of compounds in manufacture of graft polymer for cleaning products for laundry

applications

INVENTOR(S):

Blokzijl, Wilfried; Jones, Christopher Clarkson; Rogers, Susanne Henning; Royles,

PATENT ASSIGNEE(S):

Brodyck James Lachlan, White, Michael Stephen Unilever P.L.C., UK; Unilever N.V.; Hindustan Lever Limited

SOURCE:

PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003010267	. A1	20030206	WO 2002-EP7682	2002
GB, GD, GE, KP, KR, KZ, MN, MW, MX, SG, SI, SK, VN, YU, ZA,	GH, GM, LC, LK, MZ, NO, SL, TJ, ZM, ZW	, C2, DE, DK, HR, HU, ID, LR, LS, LT, NZ, OM, PH, TM, TN, TR	, BB, BG, BR, BY, BZ, DM, DZ, EC, EE, ES, IL, IN, IS, JP, KE, LU, LV, MA, MD, MG, PL, PT, RO, RU, SD, TT, TZ, UA, UG, US	0710 , CA, , FI, , KG, , MK, , SE, , UZ,
, DB, DG, CR,	CI, CZ,	DE, DK, EE.	, SZ, TZ, UG, ZM, ZW , ES, FI, FR, GB, GR , BF, BJ, CF, CG, CI	717

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GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2454382
                           AΑ
                                  20030206
                                              CA 2002-2454382
                                                                      2002
                                                                      0710
     EP 1409629
                           A1
                                  20040421
                                              EP 2002-762338
                                                                      2002
                                                                      0710
     EP 1409629
                           B1
                                 20051019
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
             MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
     BR 2002011299
                                 20040914
                                              BR 2002-11299
                                                                      2002
                                                                      0710
     AT 307189
                           Ε
                                 20051115
                                              AT 2002-762338
                                                                      2002
                                                                      0710
     US 2004171513
                           A1
                                 20040902
                                              US 2004-484392
                                                                      2004
PRIORITY APPLN. INFO.:
                                                                     0120
                                              GB 2001-17768
                                                                     2001
                                                                     0720
                                             WO 2002-EP7682
                                                                     2002
                                                                     0710
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AB Laundry treatment products comprise a graft polymer benefit agent and ≥1 addnl. laundry cleaning ingredient. The graft polymer benefit agent preferably provides soil release or fabric care benefits. The graft polymer benefit agent comprises a polysaccharide backbone and graft chains extending from the backbone, each graft chain having a number-average mol. weight 1000-200,000. The graft polymer is substantially free of crosslinking and has a degree of substitution of grafts (across a bulk sample) 1-2. The graft polysaccharide copolymers may be prepared using atom transfer radical polymerization techniques which provide control over the degree of substitution, the graft/co-block composition, and structure.

RL: TEM (Technical or engineered material use); USES (Uses) (fabric care agent; graft polysaccharide soil release agent for laundering of fabrics)

RN 494866-88-5 HCAPLUS

N Carob gum, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 9000-40-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2867-47-2 CMF C8 H15 N O2

 $\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \parallel \quad \parallel \\ \text{Me}_2 \text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \end{array}$

IT 494866-79-4P 494866-82-9P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (graft polysaccharide soil release agent for laundering of fabrics) RN 494866-79-4 HCAPLUS Cellulose, polymer with sodium 4-ethenylbenzenesulfonate, graft CN (9CI) (CA INDEX NAME) CM CRN 9004-34-6 CMF Unspecified CCI PMS, MAN *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** CM CRN 2695-37-6 CMF C8 H8 O3 S . Na

Na

RN 494866-82-9 HCAPLUS
CN Carob gum, polymer with sodium 2-methyl-2-propenoate, graft (9CI)
(CA INDEX NAME)

CM 1

CRN 9000-40-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 5536-61-8 CMF C4 H6 O2 . Na

 $\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me--C--CO}_2 \text{H} \end{array}$

Na

IT 494866-84-1
RL: TEM (Technical or engineered material use); USES (Uses)
(graft polysaccharide soil release agent for laundering of fabrics)

RN 494866-84-1 HCAPLUS

CN Carob gum, polymer with sodium 4-ethenylbenzenesulfonate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 9000-40-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2695-37-6 CMF C8 H8 O3 S . Na

Na

IC ICM C11D003-37

ICS C11D003-22; C08F251-00; C08F251-02; C08L051-02

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 35

ST graft polymer soil release fabric

care agent detergent

IT 494866-86-3 494866-88-5 494866-91-0 494866-93-2

494866-95-4 494866-97-6

RL: TEM (Technical or engineered material use); USES (Uses)

(fabric care agent; graft polysaccharide soil release agent for laundering of fabrics)

IT 494866-79-4P 494866-82-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered

material use); PREP (Preparation); USES (Uses)

(graft polysaccharide soil release agent for laundering of fabrics)

labrics)

IT 494866-84-1

RL: TEM (Technical or engineered material use); USES (Uses) (graft polysaccharide soil release agent for laundering of

fabrics)

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L121 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:97454 HCAPLUS

DOCUMENT NUMBER: 138:139071

TITLE: Polysaccharide graft polymers and their

synthesis using macroinitiators

INVENTOR(S): Rogers, Susanne Henning; Royles, Brodyck James

Lachlan; White, Michael Stephen

PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever

Limited

SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

Les Henderson

Page 18

571-272-2538

PATENT INFORMATION:

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PATENT NO.
                                                                 DATE
                                                                                         APPLICATION NO.
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                                                                                                                                     DATE
             WO 2003010206
                                                     A1
                                                             . 20030206
                                                                                        WO 2002-EP7683
                                                                                                                                     2002
                    W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,
                                                                                                                                     0710
                       AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, II, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, RV, KG
                  RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
           CA 2446375
                                                               20030206
                                                                                      CA 2002-2446375
                                                                                                                                   2002
          EP 1414867
                                                                                                                                   0710
                                                   A1
                                                               20040506
                                                                                      EP 2002-754864
                                                                                                                                   2002
                 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
          BR 2002008670
                                                  Α
                                                              20040803
                                                                                     BR 2002-8670
                                                                                                                                  2002
          US 2004176534
                                                                                                                                  0710
                                                  A1
                                                             20040909
                                                                                     US 2004-484295
                                                                                                                                  2004
PRIORITY APPLN. INFO.:
                                                                                                                                  0120
                                                                                     GB 2001-17767
                                                                                                                                 2001
                                                                                                                                 0720
                                                                                    WO 2002-EP7683
                                                                                                                                 2002
                                                                                                                                 0710
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AB The invention relates to polysaccharide graft polymers useful for incorporation as benefit agents in laundry detergent and fabric treatment compns., and their preparation The invention also relates to substituted polysaccharides useful as macroinitiator intermediates for the preparation of the polysaccharide graft polymers, and the preparation of the macroinitiators. The polysaccharide graft polymers may be used, for example, to impart soil release and/or fabric care benefits to laundry detergent or fabric

IT 67351-38-6P, Cellulose acetate isobutyrate
RL: CAT (Catalyst use); IMF (Industrial manufacture); RCT
(Reactant); PREP (Preparation); RACT (Reactant or reagent); USES

(polysaccharide graft polymers and their synthesis using macroinitiators)

RN 67351-38-6 HCAPLUS

CN Cellulose, acetate 2-methylpropanoate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-31-2 CMF C4 H8 O2

CM 3

CRN 64-19-7 CMF C2 H4 O2

RN 9000-40-2 HCAPLUS

CN Carob gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 492449-47-5P 492998-48-8P, Cellulose acetate isobutyrate-styrene 4-sulfonic acid sodium salt graft copolymer RL: IMF (Industrial manufacture); PREP (Preparation) (polysaccharide graft polymers and their synthesis using macroinitiators)

RN 492449-47-5 HCAPLUS

CN Carob gum, polymer with 2-methyl-2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 9000-40-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-41-4 CMF C4 H6 O2

 $\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$

RN 492998-48-8 HCAPLUS
CN Cellulose, acetate 2-methylpropanoate, polymer with sodium
4-ethenylbenzenesulfonate, graft (9CI) (CA INDEX NAME)

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A ...
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CRN 2695-37-6
CMF C8 H8 O3 S . Na
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Na

CM 2

CRN 67351-38-6 CMF C4 H8 O2 . x C2 H4 O2 . x Unspecified

CM 3

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 79-31-2 CMF C4 H8 O2

CM 5

CRN 64-19-7 CMF C2 H4 O2

ICM C08B037-00
ICS C08B003-14; C08B011-06; C08B011-18; C08B015-06; C08B015-00; C08B031-00; C08B031-04; C08B031-08; C08B037-14; C08B003-22; C08B007-00; C08B011-193; C08B011-20; C08B013-00
IT Detergents

(laundry: polygosphamids are fine as a constant of the constant of t

(laundry; polysaccharide graft polymers and their synthesis
using macroinitiators)
IT 67351-38-6P, Cellulose acetate isobutyrate

IT 67351-38-6P, Cellulose acetate isobutyrate
RL: CAT (Catalyst use); IMF (Industrial manufacture); RCT
(Reactant); PREP (Preparation); RACT (Reactant or reagent); USES

(Uses)

(polysaccharide graft polymers and their synthesis using macroinitiators)

9000-30-0D, Guar gum, substituted 9000-40-2D, Locust · IT Bean gum, substituted 9004-32-4D, Carboxymethylcellulose, substituted 9004-34-6D, Cellulose, substituted 9004-41-5D, Cyanoethyl cellulose, Cellulose acetate, substituted substituted 9004-57-3D, Ethyl cellulose, substituted 9004-62-0D, Hydroxyethylcellulose, substituted 9004-64-2D, Hydroxypropylcellulose, substituted 9004-67-5D, Methylcellulose, substituted 9012-76-4D, Chitosan, substituted 9032-43-3D, Cellulose sulfate, substituted 9032-46-6D, Sulfoethyl cellulose, substituted 11078-30-1, Galactomannan 11078-31-2D, Glucomannan, substituted 11138-66-2D, Xanthan gum, substituted 37294-28-3D, 37220-17-0D, Konjac glucomannan, substituted Xyloglucan, substituted RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(polysaccharide graft polymers and their synthesis using macroinitiators)

TΤ 492449-47-5P 492998-48-8P, Cellulose acetate

isobutyrate-styrene 4-sulfonic acid sodium salt graft copolymer RL: IMF (Industrial manufacture); PREP (Preparation)

(polysaccharide graft polymers and their synthesis using macroinitiators)

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE 13 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L121 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:132153 HCAPLUS

DOCUMENT NUMBER:

130:295799

TITLE:

Viscosity of solutions of xanthan/locust bean

gum mixtures

AUTHOR (S):

Casas, J. A.; Garcia-Ochoa, F.

CORPORATE SOURCE:

Dpto Ingenieria Quimica, Facultad CC Quimicas, Universidad Complutense, Madrid, 28040, Spain Journal of the Science of Food and Agriculture

SOURCE:

(1999), 79(1), 25-31 CODEN: JSFAAE; ISSN: 0022-5142

PUBLISHER:

John Wiley & Sons Ltd.

DOCUMENT TYPE: LANGUAGE:

Journal English

Xanthan and locust bean gums are polysaccharides able to produce aqueous solns. with high viscosity and non-Newtonian behavior. When these solns. are mixed a dramatic increase on viscosity is observed, much greater than the combined viscosity of the separated polysaccharide solns. In this work, the influences of different variables on the viscosity of solns. of mixts. of xanthan/locust bean gum were studied. Total polysaccharide concentration, xanthan and locust bean ratio on mixture and temperature at which the qum was dissolved (dissoln. temperature) for both xanthan and locust bean gums have been considered. Under these different operational mixture conditions shear rate and time have also been considered to describe the rheol. behavior of the solns. studied. The high viscosity increase observed in these mixts. is due to the interaction between xanthan gum and locust bean gum mols. This interaction takes place between the side chains of xanthan and the backbone of the locust bean gum. Both xanthan mol. conformation in solution - tertiary

structure - and locust bean qum structure show great influence on the final viscosity of the solution mixts. Xanthan conformation changes with temperature, going from ordered structures to disordered or chaotic ones. Locust bean qum composition changes with dissoln. temperature, showing a dissolved galactose/mannose ratio reduction when temperature increases, ie the smooth regions - zones without galactose

radicals - are predominantly dissolved. The highest viscosity was obtained for the solution mixture with a total polysaccharide concentration of 1.5 kg/m3 and a xanthan/locust ratio of 2:4 (weight/weight) and when xanthan gum and locust bean gum were dissolved at 40 and 80°, resp.

17-11 (Food and Feed Chemistry)

REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L121 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:213227 HCAPLUS

DOCUMENT NUMBER:

110:213227

TITLE:

SOURCE:

Conformational aspects of xanthan-

galactomannan gelation

AUTHOR (S): CORPORATE SOURCE: Cheetham, Norman W. H.; Mashimba, Ernest N. M. Sch. Chem., Univ. New South Wales, Kensington,

2033, Australia

Carbohydrate Polymers (1988), 9(3), 195-212

CODEN: CAPOD8; ISSN: 0144-8617

DOCUMENT TYPE: LANGUAGE:

Journal English

Gel melting temps. were used to probe some aspects of the mechanism of gel formation between xanthan gum and locust bean (carob) gum. Homogeneous gels form in water between the disordered form of xanthan and locust bean gum. In salt solns., gel islands initially form, but can be converted to homogeneous

gels by heating above the xanthan order-disorder transition temperature Dialysis of gel islands also results in homogeneous gels. It is proposed that in water, junction zones are formed between the xanthan backbone in the flat ribbon (cellulosic) conformation and the locust bean gum backbone

in a similar conformation. In the presence of salt, intermol. assocns. occur which raise the gel m.p. above that in water alone. 33-5 (Carbohydrates)

L121 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1975:412693 HCAPLUS

DOCUMENT NUMBER:

83:12693

TITLE: INVENTOR(S): Polysaccharide-containing thixotropic fluids

Kawamata, Tadanao

PATENT ASSIGNEE(S):

Jec Enterprise Co. Ltd. Ger. Offen., 20 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2427035	A1	19750116	DE 1974-2427035	
JP 50012146	A2	19750207	JP 1973-63497	1974 0605
JP 50012147	A2	19750207	JP 1973-63498	1973 0606
JP 50012148	A2	19750207	JP 1973-63499	1973 0606
FR 2243228	A 1	19750404		1973 0606
		10/30404	FR 1974-19412	1974

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Page 23

571-272-2538

Ogden 10/759,417

03/29/2006

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0605
PRIORITY APPLN. INFO .:
                                              JP 1973-63497
                                                                       1973
                                                                       0606
                                              JP 1973-63498
                                                                       1973
                                                                       0606
                                              JP 1973-63499
                                                                       1973
                                                                       0606
     A stable thixotropic liquid composition, capable of
     fireproofing clothing, extinguishing fires, and purifying waste
     gases, contained polysaccharides of the galactose and/or glucose
     type dispersed in a medium consisting of H2O, glycols (such as
     propylene glycol, polyethylene glycol, or polypropylene glycol), sugar alcs. (such as sorbitol, glycerin, or raffinol), and an
     anionic or nonionic surfactant with an
     HLB >5 and a penetration value <40 sec. For example, a mixture was
     prepared and stirred containing glycerin 62, xanthan gum (a glucoside)
     16, galactomannan 16, and polysaccharides 32
     parts. An aqueous solution containing nonylphenol 5, alkyllaurylamine 1, and
     alkylbenzenesulfonic acid neutralized with triethanolamine 2 parts
     was then added to the mixture The dispersion contained 0.5%
     surfactant and had an HLB of 18 and a surface tension of 28
     dynes/cm.
     9040-29-3 11078-30-1 11138-66-2
     RL: USES (Uses)
        (polysaccharide fluids containing, thixotropic)
RN
     9040-29-3 HCAPLUS
CN
     D-Galacto-D-qluco-D-mannan (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     11078-30-1 HCAPLUS
     D-Galacto-D-mannan (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN - 11138-66-2 HCAPLUS
     Xanthan gum (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     C09K; D06M; A62D
IC
CC
     44-1 (Industrial Carbohydrates)
     polysaccharide thixotropic fluid; galactomannan
     thixotropic fluid; xanthan gum polysaccharide fluid; surfactant
     polysaccharide thixotropic fluid
ΙT
     Surfactants
        (anionic and nonionic, polysaccharide
        fluids containing, thixotropic)
IT
     50-70-4 56-81-5, uses and miscellaneous
                                                   57-50-1D,
     \alpha-D-Glucopyranoside, \beta-D-fructofuranosyl, fatty acid
     esters 57-55-6, uses and miscellaneous 139-96-8
                                                              1331-61-9
     9002-92-0 9004-98-2 9005-64-5 9040-29-3
     11078-30-1 11078-31-2 11138-66-2 25154-52-3 25155-19-5D, Naphthalenesulfonic acid, alkyl derivs.
                                                               25322-68-3
     RL: USES (Uses)
```

(polysaccharide fluids containing, thixotropic)

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WEST Search History



DATE: Tuesday, March 28, 2006

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	L7	L6 and (styrenesulphonic or sulphonic)	1800
	L6	(@ad<20030116) and L5	13447
	L5	(galactomannan or locust)	19075
П	L4	l3 and (graft)	2
	L3	12 and (styrenesulphonic or sulphonic)	7
	L2	L1 and (galactomannan or locust)	15
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END OF SEARCH HISTORY

Collections Definition, Editing, Browsing

Name: Undefined 6475980 6455489 6358903 **Contents:** 6348441 6288022 **Comment:** ∇ US Pre-Grant Publication Full-Text Database US Patents Full-Text Database US OCR Full-Text Database Database: EPO Abstracts Database JPO Abstracts Database **Derwent World Patents Index IBM Technical Disclosure Bulletins**

